Announcement: Effective Communication: The Science of Scientific Writing

March 20-21,2003

Thursday afternoon Making Sense of the Science

Cause and Effect in Scientific Language

Friday morning Making Clear What's Important Structure, Cohesion, and Emphasis

Despite the centrality of communication to science, scientific training rarely includes explicit attention to scientific writing. The result has been frustration for many -- for students, who must learn by trial and error; for collaborators, who must negotiate common ground; and for readers, who must struggle with a professional literature that even scientists label 'opaque.' Recently, however, developments in fields such as linguistics and cognitive psychology have led to better understanding of how language works from the perspective of readers. Readers of scientific prose do not passively absorb the scientific message; rather, they actively assemble it on the basis of interpretive signals that they have become accustomed to finding embedded in the structure of language. This reader-based perspective allows writers to make objective judgments about the likelihood that their readers will interpret the prose as the writers intended. The results are substantive, not cosmetic; better writing can lead to better science.

Topics to be discussed:

- **Strategies for writing** including making connections, clarifying cause and effect, and signaling emphasis;
- **Stylistic issues** such as using the first person, choosing the active or passive voice, and handling jargon;
- **Practical concerns** such as writing collaboratively, commenting on drafts, and revising effectively;
- Documents such as research articles, abstracts, and grant applications.

Format: This one-day workshop is broken out into two session; participants are expected to attend both. Both sessions will include time for working hands-on with examples.

Presenter: Judith A. Swan was trained in research science, receiving a B.A. in Biochemistry from Harvard University and a Ph. D. in Biology from MIT. For over fourteen years, she has been conducting workshops in effective communication in institutions including the National Institutes of Health, the National Institute of Environmental Health Science, the Centers for Disease Control and Prevention, Bristol Myers Squibb Corporation, Cornell Medical School, University of Pennsylvania School of Medicine, and the University of Michigan at Ann Arbor. She currently is on the faculty of the Princeton Writing Program. This is her third workshop at Lawrence Berkeley Laboratory.

More information on the approach presented in the workshops is available in the article "The Science of Scientific Writing" (American Scientist 78:550-559, 1990). http://www.amstat.org/publications/jcgs/sci.html